

Joseph P. Marx
Assistant Vice President
Federal Regulatory
1120 20<sup>th</sup> Street, N.W., Suite 1000
Washington, DC 20036

June 26, 2013

By Electronic Filing

Ms. Marlene H. Dortch Federal Communications Commission 445 12th Street, SW Washington, DC 20554

Re: In the Matter of Promoting Interoperability in the 700 MHz Commercial Spectrum, WT Docket No. 12-69

#### Notice of Ex Parte Presentation

Dear Ms. Dortch:

On Wednesday, June 26, 2013, representatives of AT&T Services, Inc. ("AT&T") met with Federal Communications Commission ("Commission") staff to discuss issues raised in the above-referenced proceeding. In attendance were David Lawson (of the law firm Sidley Austin), Joseph Marx, Michael Goggin, and Alex Starr representing AT&T; and Jim Schlichting, Tom Peters, Paul D'Ari and Maria Kirby of Commission staff.

AT&T and Commission staff discussed the matters described in the attached document.

Please direct any questions to the undersigned.

Sincerely,

/s/ Joseph P. Marx

### Attachment

cc: Jim Schlichting
Tom Peters
Paul D'Ari
Maria Kirby



### **LOWER 700 MHZ INTEROPERABLITY**

A BAND 12 MANDATE WOULD CAUSE HARM AND WOULD NOT RESOLVE THE UNDERLYING A-BLOCK ISSUES



## A BAND 12 MANDATE WOULD CAUSE GREAT HARM AND OFFER NO BENEFIT

- Even assuming AT&T continued to use Band 17, a Band 12 device mandate would harm AT&T customers and competition.
- It would not resolve the interference issues that led to the creation of Band 17. A-block would remain subject to exclusion zones
- It is unnecessary to create a Band 12 device ecosystem.
- It would be an extraordinary, unprecedented and unlawful regulatory intrusion.



## PROBLEMS WITH USING AN ADDITIONAL PORT FOR BAND 12

- Many devices currently support only 2 sub-1GHz ports and AT&T already needs more than that for its existing bands.
  - Band 17 (Lower 700 MHz B & C Blocks)
  - Band 5 (850 MHz)
  - Band 29 (Lower 700 MHz D & E Blocks)
- AT&T will require additional sub-1 GHz ports for future needs – 600 MHz, international LTE roaming.
- Forcing AT&T to use a low-band port for Band 12 would require it to sacrifice another band.
- Adding a port (and filter) AT&T does not need would unnecessarily add to the challenges in board layout and form factor.



## PROBLEMS WITH USING SAME PORT FOR BAND 12/17

- Requires a switch that is set to either Band 12 or Band 17. No carrier uses such a switch today, and for good reason.
- The addition of such a switch would result in insertion loss, causing degraded performance, including:
  - Reduced throughput
  - Reduced coverage
  - Reduced battery life
- Since this approach would require both an additional switch and an additional filter, it would also create more challenges in board layout and form factor limitations.
- A Block licensees previously rejected this approach precisely due to the performance degradation:

"Qualcomm has . . . offered a modified RTR8600 that could support a second 700 MHz band class, as well as the 850 MHz cellular band, by utilizing an external switch. Qualcomm informed A Block licensees, however, that an external switch would degrade performance of the device. Consequently, no Lower A Block operator was interested in this modified RTR8600." (Qualcomm Comments, at 60)



## A BAND 12 MANDATE WOULD NOT "FIX" A BLOCK ISSUES

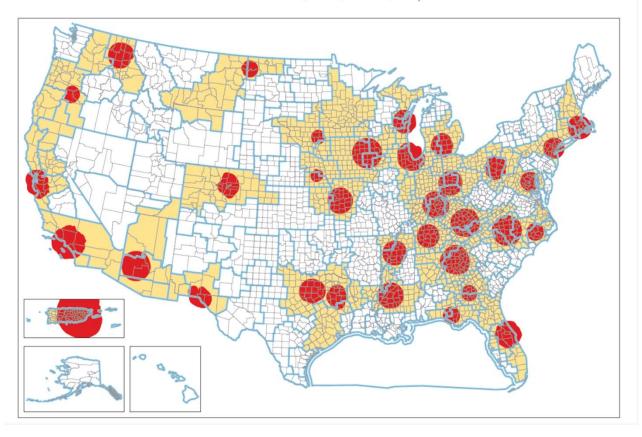
- It would not remove Channel 51 exclusion zones, which would continue to deter A Block deployment.
- It is not needed to ensure availability of Band 12 devices.
- It would not even enable A Block licensees to achieve greater scale in device purchases (even assuming that is a valid basis for the mandate, which it is not).
  - A Block Licensees would not purchase Band 12/17 models designed for use on AT&T--no backward compatibility to CDMA/EV-DO.
  - Current Band 12 devices derived from Band 13 LTE models.

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# A-BLOCK EXCLUSION ZONES COVER 30 OF THE TOP 100 MARKETS

### DTV Channel 51 Contours EA Market Boundary Overlay & EAs Impacted





## A BAND 12 MANDATE NOT NEEDED TO DEVELOP BAND 12 DEVICE ECOSYSTEM

- A Band 12 ecosystem already exists:
  - U.S. Cellular already offers ten Band 12 LTE smartphones from four different manufacturers (Samsung, Motorola, Kyocera, and LG) and recently announced that it has "more devices to come throughout the year."
  - U.S. Cellular offered the state-of-the-art Galaxy S4 at the same time as AT&T, Verizon, and T-Mobile.
  - It has been widely reported that U.S. Cellular will also offer a Band 12 version of Motorola's highly anticipated flagship device, the Moto X "XFON" when it is released later this year.
  - U.S. Cellular offers a Band 12 Tablet, a modem, and 2 Mobile Hotspots



# BAND 12 MANDATE NOT NEEDED FOR ROAMING

- With broad availability of multi-band LTE chipsets, every operator has many LTE roaming options.
- Many AT&T's LTE devices, for example, have Band 17 (700 MHz), Band 4 (AWS), Band 2 (cellular), and Band 5 (PCS).
- AT&T, Verizon, Sprint, T-Mobile, Clearwire, and others are all deploying LTE networks in various bands, and A-Block licensees with no LTE device base have maximum flexibility to plan their device portfolios to support roaming on any of those networks.
- Sprint's CEO: "recently conducted . . . LTE roaming trials with C Spire, and that it was working with other operators on similar trials." See Dan Meyer, CCA Spring 2013: Sprint Nextel moves to enable LTE roaming, RCRWireless, Apr. 18, 2013.
- CCA recently issued an RFP "for organizations interested in hosting the Data Services Hub, and TNS was selected." "The TNS Data Services Hub... will provide participating operators the opportunity to connect for services including 4G LTE roaming, Wi-Fi access and interoperability with requisite 3G roaming fallback." See Transaction Network Services, Press Release, TNS Delivers Next Generation Data Services Hub Including LTE Roaming Solutions for CCA Members (Mar. 12, 2013)



## THE PROPOSED MANDATE WOULD BE UNLAWFUL

- Under the Communications Act, the Commission has no authority over device makers and can issue regulations affecting devices only to the extent that those devices are actually used in a transmission. *American Lib. Ass'n* v. *FCC*, 406 F.3d 689, 703 (D.C. Cir. 2005) ("at most, the Commission only has general authority [under the Act] to regulate apparatus used for the receipt of radio or wire communication while those apparatus are engaged in communication").
- Accordingly, as many recent cases have confirmed, the Commission must identify a specific grant of authority in Title III that would authorize the proposed mandate.
- Section 303(b), which was the basis for the Commission's data roaming rules, cannot support a Band 12 mandate, because a rule requiring components that will not be used cannot be characterized as prescribing the "nature" of any licensee's service.
- Nor can the Commission rely on Section 316, because (1) a Band 12 mandate would fundamentally change the terms of the license, *Community Television, Inc.* v. *FCC*, 216 F.3d 1133, 1140-41 (2000), and (2) any "public interest" benefits of such a modification are extremely speculative and likely nonexistent, given that a robust Band 12 device ecosystem already exists, device makers have no duty to deal with any provider, and A Block providers would need CDMA fallback and still face Channel 51 exclusion zone and F Block interference obstacles.
- The D.C. Circuit has made clear that Sections 301 and 303(r) are not independent grants of authority. *Comcast Corp.* v. *FCC*, 600 F.3d 642, 652-54 (D.C. Cir. 2010); *Motion Picture Ass'n of Am., Inc.* v. *FCC*, 309 F.3d 796, 806 (D.C. Cir. 2002).



### **E-BLOCK INTERFERENCE**

### (Flaws with Dish Analysis)

- Unrealistic LTE signal levels
  - DISH erroneously assumes LTE signals on the ground between -40dBm and -10dBm within 1km of LTE transmitters (typically less than -50dBm and much lower at the cell edge).
- Understates E-Block signal levels near transmitters
  - DISH's analysis does not rely on actual field measurements
  - Wireless Strategy field measurements during DISH Trial show levels on the ground often above -26dBm
- Ignores interference beyond 1km
  - DISH reports its E-Block and LTE signal level estimates only within 1 km of the transmitter. And even at the inflated LTE signal levels and understated E-Block signal levels it assumes, DISH's analysis confirms that E-Block signals overwhelm LTE beyond 1 km.
- Assumes all E-Block and LTE transmitters are collocated.

